AMENDMENT TO THE CLAIMS:

Please amend Claims 81-84 as follows:

Claims 1-80 (canceled)

Claim 81 (currently amended): An automated unitary-type package identification and dimensioning system supported above a conveyor belt structure, said automated unitary-type package identification and measuring system comprising:

a single system housing supported above said conveyor belt structure;

a package identification subsystem, disposed within said single system housing, for reading bar codes on packages transported along said conveyor belt structure, and producing package identification data that identifies each identified said package, and wherein said package identification subsystem includes a 1D imaging-based camera for capturing 1D images of said packages transported past said system housing; and

a package dimensioning subsystem, disposed within said single system housing, for capturing package dimension information about the dimensions of each said package as each said package is transported past said system housing, and for associating with said package dimension data with package identification data produced by said package identification subsystem.

Claim 82 (currently amended): The automated unitary-type package identification and dimensioning system of claim 24 81, wherein said package dimensioning subsystem comprises

- (i) a Laser Detecting And Ranging (LADAR-based) scanning method for capturing twodimensional range data maps of the space above said conveyor structure, along which said packages are transported, and
- (ii) a two-dimensional image contour tracing method for extracting package dimension data from said two-dimensional range data maps.

Claim 83 (currently amended): The automated unitary-type package identification and dimensioning system of claim 24 81, wherein the velocity of each said package is computed by using a pair of amplitude modulated laser beams projected from said package dimensioning

subsystem at different angular projections over said conveyor belt structure along which said packages are transported.

Claim 84 (currently amended): The automated unitary-type package identification and measuring system of claim 23 83, wherein the amplitude modulated laser beams have multiple wavelengths to sense packages have having a wide range of reflectivity characteristics.